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ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE FIRST NAMED INVENTOR APPLICATION NO. 5165 Stefan Wellhofer KST / 03 02/11/2002 10/073,561 26875 7590 05/07/2003 EXAMINER WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER DUONG, HUNG V **441 VINE STREET** CINCINNATI, OH 45202 PAPER NUMBER ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 10/073,561

Applicant(s)

Wellhofer

Examiner

Hung Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1 136 (a) In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U S C § 133) - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment See 37 CFR 1 704(b) Status 1) Responsive to communication(s) filed on ____ 2b) X This action is non-final. 2a) This action is **FINAL**. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims is/are pending in the application. 4) X Claim(s) 1-10 4a) Of the above, claim(s) ______ is/are withdrawn from consideration. is/are allowed. 5) X Claim(s) 10 6) X Claim(s) 1-4, 8, and 9 is/are rejected. _____ is/are objected to. 7) X Claim(s) 5-7 are subject to restriction and/or election requirement. 8) Claims **Application Papers** 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on ______ is/are a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) X Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\overline{\mathbf{X}}$ All b) $\overline{\mathbf{D}}$ Some* c) $\overline{\mathbf{D}}$ None of: 1. X Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. ___ 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) The translation of the foreign language provisional application has been received. 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 4) Interview Summary (PTO-413) Paper No(s) 1) X Notice of References Cited (PTO-892) 5) Notice of Informal Patent Application (PTO-152) 2) ___ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s)

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Tani et al. (EP 0821385).

Regarding claims 1-3, Tani et al disclose an apparatus for mounting and cooling a flat screen during operation, comprising a housing 22 for accommodating the flat screen 42 and heat generating electric and electronic units 36, and at least one thermal bridge 44 for conducting the heat generated by these units to a heat conductive plate 38 arranged at a rear side of the housing 22, the plate being provided with a profile 52 for faster cooling of the plate, wherein the plate forms a rear wall 26 of the housing 22, the profile 52 forms a plurality of chimney-like cavities on the rear side of the housing 22, the cavities each comprising a lower end portion and an upper end portion, wherein in the lower end portion at least one opening for supplying cool air into the respective cavity is formed and in the upper end portion at least one outlet opening for discharging heated air from the cavity to the atmosphere is formed, and the rear wall of the

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housing 22 comprises a plurality of through holes 28, 30 arranged in an area of the cavities, the through holes 28, 30 serving for supplying and discharging air into and from a space arranged between the heat generating units 36 and the rear wall 26. The housing 22 comprises a housing frame and a thermal bridge 44 made of heat conductive material is formed on at least one position of a printed circuit board 46 attached on the housing frame, with a plurality of heat generating components of the flat screen being arranged on the printed circuit board 46, the thermal bridge 44 being oriented towards the rear wall of the housing 22 and contacting the rear wall in operation. The air located between the printed circuit board 46 and a final front glass plate of the flat screen 42 and being heated during operation is conducted into a space between the printed circuit board 46 and the rear wall via at least one channel.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tani et al. (EP 0821385).

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Regarding claim 4, Tani et al disclose all the subject matter of the claimed invention except for the profile is attached to the rear wall by means of screw. However, Tani et al teach the profile 52 is attached to the central region board then the central region board attached to the rear wall by means of screw 60 (see figures 21, 23). Therefore, it would be obvious to one of ordinary skill to utilize the screw of figure 21 of Tani to attach the profile to the rear wall as mentioned by applicant's invention in order to secure the profile to the rear wall.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tani et al. (EP 0821385) in view of Grieger (US Pat. 6,015,186).

Regarding claim 8, Tani et al disclose all the subject matter of the claimed invention except for the housing frame and the rear wall are formed of extruded aluminum profiles..

However, Grieger teaches the housing frame and the rear wall are formed of extruded aluminum profiles (see column 2, lines 50-57). Therefore, it would be obvious to one of ordinary skill to utilize extruded aluminum profiles as the housing frame or wall of Grieger into housing frame or wall of Tani et al as mentioned by applicant's invention in order to be in good restrain system.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tani et al. (EP 0821385) in view of Grieger (US Pat. 6,015,186) and further in view of Kato et al. (US Pat. 6,311,996).

Regarding claim 9, Tani et al and Grieger disclose all the subject matter of the claimed invention except for the housing frame consists of a plurality of parts that are joined by means of laser welding. However, Kato et al teach the housing frame consists of a plurality of parts that are

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joined by means of laser welding (see column 2, lines 41-45). Therefore, it would be obvious to one of ordinary skill to utilize laser welding method of Kato et al to weld a plurality of aluminum parts of Tani et al and Grieger as mentioned by applicant's invention in order to join the aluminum parts as a housing accordingly.

Allowable Subject Matter

- 7. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to show that the chimney-like cavities have an essentially cartridge-like cross section which has a rounded apex directed to the outside or that the chimney-like cavities each have a spacing from one another.
- 9. Claim 10 is allowed.
- 10. The following is an examiner's statement of reasons for allowance: the prior art fails to show that the profile is attached on the rear wall of the housing by means of screws and together with the rear wall forms a plurality of chimney-like cavities, which are arranged at mutual distance and have a substantially cartridge-like cross section with a rounded apex directed to the outside and each comprise a lower end portion and an upper end portion, wherein in the lower end

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portion at least one opening is formed for supplying cool air into the respective cavity and in the

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upper end portion at least one outlet opening is formed for discharging heated air from the cavity

to the atmosphere.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's 11.

disclosure.

Aguilera (US Pat. 5,606,341) teaches passive CPU cooling and LCD heating for laptop

computer.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Hung Duong whose telephone number is (703) 308-4889. The examiner

can normally be reached on M-F from 8:30 to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Darren Schuberg, can be reached on (703) 308-4815. The fax phone number for this Group is

(703)308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703)308-0956.

HVD

5/2/03.

Hung Duong

Patent Examiner.